

Dr. Bird looked up impatiently as the door of his private laboratory in the Bureau of Standards swung open, but the frown on his face changed to a smile as he saw the form of Operative Carnes of the United States Secret Service framed in the doorway.

"Hello, Carnes," he called cheerfully. "Take a seat and make yourself at home for a few minutes. I'll be with you as soon as I finish getting this weight."

Carnes sat on the edge of a bench and watched with admiration the long nervous hands and the slim tapering fingers of the famous scientist. Dr. Bird stood well over six feet and weighed two hundred and six pounds stripped: his massive shoulders and heavy shock of unruly black hair combined to give him the appearance of a prize-fighter—until one looked at his hands. Acid stains and scars could not hide the beauty of those mobile hands, the hands of an artist and a dreamer. An artist Dr. Bird was, albeit his artistry expressed itself in the most delicate and complicated experiments in the realms of pure and applied science that the world has ever seen, rather than in the

commoner forms of art.

The doctor finished his task of weighing a porcelain crucible, set it carefully into a dessicator, and turned to his friend.

"What's on your mind, Carnes?" he asked. "You look worried. Is there another counterfeit on the market?"

The operative shook his head.

"Have you been reading those stories that the papers have been carrying about Mammoth Cave?" he asked.

Dr. Bird emitted a snort of disgust.

"I read the first one of them part way through on the strength of its being an Associated Press dispatch," he replied, "but that was enough. It didn't exactly impress me with its veracity, and, from a viewpoint of literature, the thing was impossible. I have no time to pore over the lucubrations of an inspired press agent."

"So you dismissed them as mere press agent work?"

"Certainly. What else could they be? Things like that don't happen fortuitously just as the tourist season is about to open. I suppose that those yarns will bring flocks of the curious to Kentucky though: the public always responds well to sea serpent yarns."

"Mammoth Cave has been closed to visitors for the season," said Carnes quietly.

"What?" cried the doctor in surprise. "Was there really something to those wild yarns?"

"There was, and what is more to the point, there still is. At least there is enough to it that I am leaving for Kentucky this evening, and I came here for the express purpose of asking you whether you wanted to come along. Bolton suggested that I ask you: he said that the whole thing sounded to him like magic and that magic was more in your line than in ours. He made out a request for your services and I have it in my pocket now. Are you interested?"

"How does the secret service cut in on it?" asked the doctor. "It seems to me that it is a state matter. Mammoth Cave isn't a National Park."

"Apparently you haven't followed the papers. It *was* a state matter until the Governor asked for federal troops. Whenever the regulars get into trouble, the federal government is rather apt to take a hand."

"I didn't know that regulars had been sent there. Tell me about the case."

"Will you come along?"

Dr. Bird shook his head slowly.

"I really don't see how I can spare the time, Carnes," he said. "I am in the midst of some work of the utmost importance and it hasn't reached the stage where I can turn it over to an assistant."

"Then I won't bother you with the details," replied Carnes as he rose.

"Sit down, confound you!" cried the doctor. "You know better than to try to pull that on me. Tell me your case, and then I'll tell you whether I'll go or not. I can't spare the time, but, on the other hand, if it sounds interesting enough...."

Carnes laughed.

"All right, Doctor," he said, "I'll take enough time to tell you about it even if you can't go. Do you know anything about it?"

"No. I read the first story half way through and then stopped. Start at the beginning and tell me the whole thing."

"Have you ever been to Mammoth Cave?"

"No."

"It, or rather they, for while it is called Mammoth Cave it is really a series of caves, are located in Edmonson County in Central Kentucky, on a spur railroad from Glasgow Junction on the Louisville and

Nashville Railroad. They are natural limestone caverns with the customary stalactite and stalagmite formation, but are unusually large and very beautiful. The caves are quite extensive and they are on different levels, so that a guide is necessary if one wants to enter them and be at all sure of finding the way out. Visitors are taken over a regular route and are seldom allowed to visit portions of the cave off these routes. Large parts of the cave have never been thoroughly explored or mapped. So much for the scene.

"About a month ago a party from Philadelphia who were motoring through Kentucky, entered the cave with a regular guide. The party consisted of a man and his wife and their two children, a boy of fourteen and a girl of twelve. They went quite a distance back into the caves and then, as the mother was feeling tired, she and her husband sat down, intending to wait until the guide showed the children some sights which lay just ahead and then return to them. The guide and the children never returned."

"What happened?"

"No one knows. All that is known is the bare fact that they have not been seen since."

"A kidnapping case?"

"Apparently not, in the light of later happenings, although that was at first thought to be the explanation. The parents waited for some time. The mother says that she heard faint screams in the distance some ten minutes after the guide and the children left, but they were very far away and she isn't sure that she heard them at all. At any rate, they didn't impress her at the time.

"When half an hour had passed they began to feel anxious, and the father took a torch and started out to hunt for them. The usual thing happened; he got lost. When *he* failed to return, the mother, now thoroughly alarmed, made her way, by some uncanny sense of direction, to the entrance and gave the alarm. In half an hour a dozen search parties were on their way into the cave. The father was soon located, not far from the beaten trail, but despite three days of constant search, the children were not located. The only trace

of them that was found was a bracelet which the mother identified. It was found in the cavern some distance from the beaten path and was broken, as though by violence. There were no other signs of a struggle.

"When the bracelet was found, the kidnapping theory gained vogue, for John Harrel, the missing guide, knew the cave well and natives of the vicinity scouted the idea that he might be lost. Inspired by the large reward offered by the father, fresh parties began to explore the unknown portions of the cave. And then came the second tragedy. Two of the searchers failed to return. This time there seemed to be little doubt of violence, for screams and a pistol shot were faintly heard by other searchers, together with a peculiar 'screaming howl,' as it was described by those who heard it. A search was at once made toward the spot where the bracelet had been picked up, and the gun of one of the missing men was found within fifty yards of the spot where the bracelet had been discovered. One cylinder of the revolver had been discharged."

"Were there any signs on the floor?"



"The searchers said that the floor appeared to be rather more moist and slimy than usual, but that was all. They also spoke of a very faint smell of musk, but this observation was not confirmed by others who arrived a few moments later."

"What happened next?"

"The Governor was appealed to and a company of the National Guard was sent from Louisville to Mammoth Cave. They took up camp at the mouth of the cave and prevented everyone from entering. Soldiers armed with service rifles penetrated the caverns, but found nothing. Visitors were excluded, and the guardsmen established regular patrols and sentry posts in the cave with the result that one night, when time came for a relief, the only trace that could be found of one of the guards was his rifle. It had not been fired. Double guards were then posted, and nothing happened for several days—and then another sentry disappeared. His companion came rushing out of the cave screaming. When he recovered, he admitted that both he and the missing man had gone to sleep and that he awoke to find his comrade gone.

He called, and he says that the answer he received was a peculiar whistling noise which raised all the hair on the back of his neck. He flashed his electric torch all around, but could see nothing. He swears, however, that he heard a slipping, sliding noise approaching him, and he felt that some one was looking at him. He stood it as long as he could and then threw down his rifle and ran for his life."

"Had he been drinking?"

"No. It wasn't delirium either, as was shown by the fact that a patrol found his gun where he had thrown it, but no trace of the other sentry. After this second experience, the guardsmen weren't very eager to enter the cave, and the Governor asked for regulars. A company of infantry was ordered down from Fort Thomas to relieve the guardsmen, but they fared worse than their predecessors. They lost two men the first night of their guard. The regulars weren't caught napping, for the main guard heard five shots fired. They rushed a patrol to the scene and found both of the rifles which had been fired, but the men were gone.

"The officer of the day made a thorough search of the vicinity and found, some two hundred yards from the spot where the sentries had been posted, a crack in the wall through which the body of a man could be forced. This bodycrack had fresh blood on each side of it. Several of his men volunteered to enter the hole and search, but the lieutenant would not allow it. Instead, he armed himself with a couple of hand-grenades and an electric torch and entered himself. That was last Tuesday, and he has not returned."

"Was there any disturbance heard from the crack?"

"None at all. A guard was posted with two machine-guns pointed at the crack in the wall, and a guard of eight men and a sergeant stationed there. Last night, about six o'clock, while the guard were sitting around their guns, a faint smell of musk became evident. No one paid a great deal of attention to it, but suddenly for no apparent reason at all one of the men on guard was jerked into the air feet upwards. He gave a scream of fear, and an unearthly screech answered him. The guard, with the exception of one man, turned tail and ran. One man stuck by his gun and

poured a stream of bullets into the crack. The retreating men could hear the rattle of the gun for a few moments and then there was a choking scream, followed by silence. When the officer of the day got back with a patrol, there was a heavy smell of musk in the air, and a good deal of blood was splashed around. The machine-guns were both there, although one of them was twisted up until it looked like it had been through an explosion.

"The Officer commanding the company investigated the place, ordered all men out of the cave, and communicated with the War Department. The Secretary of War found it too tough a nut to crack and he asked for help, so Bolton is sending me down there. Do you think, in view of this yarn, that your experiments can wait?"

The creases on Dr. Bird's high forehead had grown deeper and deeper as Carnes had told his story, but now they suddenly disappeared, and he jumped to his feet with a boyish grin.

"How soon are we leaving?" he asked.

"In two hours, Doctor. A car is waiting for us downstairs and I have reservations booked for both of us on the Southern to-night. I knew that you were coming; in fact, the request for your services had been approved before I came here to see you."

Dr. Bird rapidly divested himself of his laboratory smock and took his coat and hat from a cupboard.

"I hope you realize, Carnsey, old dear," he said as he followed the operative out of the building, "that I have a real fondness for your worthless old carcass. I am leaving the results of two weeks of patient work alone and unattended in order to keep you out of trouble, and I know that it will be ruined when I get back. I wonder whether you are worth it?"

"Bosh!" retorted Carnes. "I'm mighty glad to have you along, but you needn't rub it in by pretending that it is affection for me that is dragging you reluctantly into this mess. With an adventure like this ahead of you, leg-irons and handcuffs wouldn't keep you away from Mammoth Cave, whether I was going or not."

It was late afternoon before Dr. Bird and Carnes dismounted from the special train which had carried them from Glasgow Junction to Mammoth Cave. They introduced themselves to the major commanding the guard battalion which had been ordered down to reinforce the single company which had borne the first brunt of the affair, and then interviewed the guards who had been routed by the unseen horror which was haunting the famous cave. Nothing was learned which differed in any great degree from the tale which Carnes had related to the doctor in Washington, except that the officer of the day who had investigated the last attack failed to entirely corroborate the smell of musk which had been reported by the other observers.

"It might have been musk, but to me it smelled differently," he said. "Were you ever near a rattlesnake den in the west?"

Dr. Bird nodded.

"Then you know the peculiar reptilian odor which such a place gives off. Well, this smell was somewhat

similar, although not the same by any manner of means. It was musky all right, but it was more snake than musk to me. I rather like musk, but this smell gave me the horrors."

"Did you hear any noises?"

"None at all. The men describe some rather peculiar noises and Sergeant Jervis is an old file and pretty apt to get things straight, but they may have been made by the men who were in trouble. I saw a man caught by a boa in South America once, and the noises he made might very well have been described in almost the same words as Jervis used."

"Thanks, Lieutenant," replied the Doctor. "I'll remember what you have told me. Now I think that we'll go into the cave."

"My orders are to allow no one to enter, Doctor."

"I beg your pardon. Carnes, where is that letter from the Secretary of War?"

Carnes produced the document. The lieutenant examined it and excused himself. He returned in a few moments with the commanding officer.

"In the face of that letter, Dr. Bird," said the major, "I have no alternative to allowing you to enter the cave, but I will warn you that it is at your own peril. I'll give you an escort, if you wish."

"If Lieutenant Pearce will come with me as a guide, that will be all that I need."

The lieutenant paled slightly, but threw back his shoulders.

"Do you wish to start at once, sir?" he asked.

"In a few moments. What is the floor of the cave like where we are going?"

"Quite wet and slimy, sir."

"Very slippery?"



"Yes, sir."

"In that case before we go in we want to put on baseball shoes with cleats on them, so that we can run if we have to. Can you get us anything like that?"

"In a few moments, sir."

"Good! As soon as we can get them we'll start. In the meantime, may I look at that gun that was found?"

The Browning machine-gun was laid before the doctor. He looked it over critically and sniffed delicately at it. He took from his pocket a phial of liquid, moistened a portion of the water-jacket of the weapon, and then rubbed the moistened part briskly with his hand. He sniffed again. He looked disappointed, and again examined the gun closely.

"Carnes," he said at length, "do you see anything on this gun that looks like tooth marks?"

"Nothing, Doctor."

"Neither do I. There are some marks here which might quite conceivably be finger-prints of a forty-foot giant, and those two parallel grooves look like the result of severe squeezing, but there are no tooth marks. Strange. There is no persistent odor on the gun, which is also strange. Well, there's no use in theorizing: we are confronted by a condition and not a theory, as someone once said. Let's put on those baseball shoes and see what we can find out."

Dr. Bird led the way into the cave, Carnes and the lieutenant following closely with electric torches. In each hand Dr. Bird carried a phosphorus hand-grenade. No other weapons were visible, although the doctor knew that Carnes carried a caliber .45 automatic pistol strapped under his left armpit. As they passed into the cave the lieutenant stepped forward to lead the way.

"I'm going first," said the doctor. "Follow me and indicate the turns by pressure on my shoulder. Don't speak after we have started, and be ready for instant flight. Let's go."

Forward into the interior of the cave they made their way. The iron cleats of the baseball shoes rang on the floor and the noise echoed back and forth between the walls, dying out in little eerie whispers of sound that made Carnes' hair rise. Ever forward they pressed, the lieutenant guiding the doctor by silent pressure on his shoulder and Carnes following closely. For half a mile they went on until a restrainable pressure brought the doctor to a halt. The lieutenant pointed silently toward a crack in the wall before them. Carnes started forward to examine it, but a warning gesture from the doctor stopped him.

Slowly, an inch at a time, the doctor crept forward, hand-grenades in readiness. Presently he reached the crack and, shifting one of the grenades into his pocket, he drew forth an electric torch and sent a beam of light through the crack into the dark interior of the earth.

For a moment he stood thus, and then suddenly snapped off his torch and straightened up in an attitude of listening. The straining ears of Carnes and Lieutenant Pearce could hear a faint slithering noise

coming toward them, not from the direction of the crack, but from the interior of the cave.

Simultaneously a faint, musky, reptilian odor became apparent.

"Run!" shouted the doctor. "Run like hell! It's loose in the cave!"

The lieutenant turned and fled at top speed toward the distant entrance to the cave, Carnes at his heels. Dr. Bird paused for an instant, straining his ears, and then threw a grenade. A blinding flash came from the point where the missile struck and a white cloud rose in the air. The doctor turned and fled after his companions. Not for nothing had Dr. Bird been an athlete of note in his college days. Despite the best efforts of his companions, who were literally running for their lives, he soon caught up with them. As he did so a weird, blood-curdling screech rose from the darkness behind them. Higher and higher in pitch the note rose until it ended suddenly in a gurgling grunt, as though the breath which uttered it had been suddenly cut off. The slithering, rustling noise became louder on their trail.

"Faster!" gasped the doctor, as he put his hand on Carnes' shoulder and pushed him forward.

The noise of pursuit gained slightly on them, and a sound as of intense breathing became audible. Dr. Bird paused and turned and faced the oncoming horror. His electric torch revealed nothing, but he listened for a moment, and then threw his second grenade. Keenly he watched its flight. It flew through the air for thirty yards and then struck an invisible obstruction and bounded toward the ground. Before it struck the downward motion ceased, and it rose in the air. As it rose it burst with a sharp report, and a wild scream of pain filled the cavern with a deafening roar. The doctor fled again after his companions.

By the time he overtook them the entrance of the cave loomed before them. With sobs of relief they burst out into the open. The guards sprang forward with raised rifles, but Dr. Bird waved them back.

"There's nothing after us, men," he panted. "We got chased a little way, but I tossed our pursuer a handful of phosphorus and it must have burned his fingers a

little, judging from the racket he made. At any rate, it stopped the pursuit."

The major hurried up.

"Did you see it, Doctor?" he asked.

"No, I didn't. No one has ever seen it or anything like it. I heard it and, from its voice, I think it has a bad cold. At least, it sounded hoarse, so I gave it a little white phosphorus to make a poultice for its throat, but I didn't get a glimpse of it."

"For God's sake, Doctor, what is it?"

"I can't tell you yet, Major. So far I can tell, it is something new to science and I am not sure just what it looks like. However, I hope to be able to show it to you shortly. Is there a telegraph office here?"

"No, but we have a Signal Corps detachment with us, and they have a portable radio set which will put us in touch with the army net."

"Good! Can you place a tent at my disposal?"

"Certainly, Doctor."

"All right, I'll go there, and I would appreciate it if you would send the radio operator to me. I want to send a message to the Bureau of Standards to forward me some apparatus which I need."

"I'll attend to it, Doctor. Have you any special advice to give me about the guarding?"

"Yes. Have you, or can you get, any live stock?"

"Live stock?"

"Yes. Cattle preferred, although hogs or sheep will do at a pinch. Sheep will do quite well."

"I'll see what I can do, Doctor."

"Get them by all means, if it is possible to do so. Don't worry about paying for them: secret service funds are not subject to the same audit that army funds get. If

you can locate them, drive a couple of cattle or half a dozen sheep well into the cave and tether them there. If you don't get them, have your sentries posted well away from the cave mouth, and if any disturbance occurs during the night, tell them to break and run. I hope it won't come out, but I can't tell."

A herd of cattle was soon located and two of the beasts driven into the cave. Two hours later a series of horrible screams and bellowings were heard in the cave. Following their orders the sentries abandoned their posts and scattered, but the noise came no nearer the mouth, and in a few minutes silence again reigned.

"I hope that will be all that will be needed for a couple of days," said the doctor to the commanding officer, "but you had better have a couple more cattle driven in in the morning. We want to keep the brute well fed. Is there a tank stationed at Fort Thomas?"

"No, there isn't."

"Then radio Washington that I want the fastest three-



man tank that the army has sent here at once. Don't bother with military channels, radio direct to the Adjutant General, quoting the Secretary of the Treasury as authority. Tell him that it's a rush matter, and sign the message 'Bird' if you are afraid of getting your tail twisted."

Twice more before the apparatus which the doctor had ordered from Washington arrived cattle were driven into the depths of the cave, and twice were the screams and bellowings from the cave repeated. Each time searching parties found the cattle gone in the morning. A week after the doctor's arrival, a special train came up, carrying four mechanics from the Bureau of Standards, together with a dozen huge packing cases. Under the direction of the doctor the cases were unpacked and the apparatus put together. Before the assembly had been completed the tank which had been requested arrived from Camp Meade, and the Bureau mechanics began to install some of the assembled units in it.

The first apparatus which was installed in the tank consisted of an electric generator of peculiar design

which was geared to the tank motor. The electromotive force thus generated was led across a spark gap with points of a metallic substance. The light produced was concentrated by a series of parabolic reflectors, directed against a large quartz prism, and thence through a lens which was designed to throw a slightly divergent beam.

"This apparatus," Dr. Bird explained to the Signal Corps officer, who was an interested observer, "is one which was designed at the Bureau for the large scale production of ultra-violet light. There is nothing special about the generator except that it is highly efficient and gives an almost constant electromotive force. The current thus produced is led across these points, which are composed of magnalloy, a development of the Bureau. We found on investigation that a spark gave out a light which was peculiarly rich in ultra-violet rays when it was passed between magnesium points. However, such points could not be used for the handling of a steady current because of lack of durability and ease of fusion, so a mixture of graphite, alundum and metallic magnesium was

pressed together with a binder which will stand the heat. Thus we get the triple advantages of ultra-violet light production, durability, and high resistance.

"The system of reflectors catches all of the light thus produced except the relatively small portion which goes initially in the right direction, and directs it on this quartz prism where, due to the refractive powers of the prism, the light is broken up into its component parts. The infra-red rays and that portion of the spectrum which lies in the visible range, that is, from red to violet inclusive, are absorbed by a black body, leaving only the ultra-violet portion free to send a beam through this quartz lens."

"I thought that a lens would absorb ultra-violet light," objected the signal officer.

"A lens made of glass will, but this lens is made of rock crystal, which is readily permeable to ultra-violet. The net result of this apparatus is that we can direct before us as we move in the tank a beam of

light which is composed solely of the ultra-violet portion of the spectrum."

"In other words, an invisible light?"

"Yes. That is, invisible to the human eye. The effect of this beam of ultra-violet light in the form of severe sunburn would be readily apparent if you exposed your skin to it for any length of time, and the effects on your eyesight of continued gazing would be apt to be disastrous. It would produce a severe opthalmia and temporary impairment of the vision, somewhat the same symptoms as are observed in snow blindness."

"I see. May I ask what is the object of the whole thing?"

"Surely. Before we can successfully combat this peculiar visitant from another world, it is necessary that we gain some idea of the size and appearance of it. Nothing of the sort has before made its appearance, so far as the annals of science go, and so I am forced to make some rather wild guesses at the

nature of the animal. You are probably aware of the fact that the property of penetration possessed by all waves is a function of their frequency, or, perhaps I should say, of their wave-length?"

"Certainly."

"The longer rays of visible light will not penetrate as deeply into a given substance as the shorter ultra-violet rays. This visitor is evidently from some unexplored and, indeed, unknown cavern in the depths of the earth where visible light has never penetrated. Apparently in this cavern the color of the inhabitants is ultra-violet, and hence invisible to us."

"You are beyond my depth, Doctor."

"Pardon me. You understand, of course, what color is? When sunlight, which is a mixture of all colors from infra-red to ultra-violet inclusive, falls on an object, certain rays are reflected and certain others are absorbed. If the red rays are reflected and all others absorbed, the object appears red to our eyes. If all the rays are reflected, the object appears white, and if all

are absorbed, it appears black."

"I understand that."

"The human eye cannot detect ultra-violet. Suppose then, that we have an object, either animate or inanimate, the surface of which reflects only ultra-violet light, what will be the result? The object will be invisible."

"I should think it would be black if all the rays except the ultra-violet were absorbed."

"It would, but mark, I did not say the others were absorbed. Are you familiar with fluorescein?"

"No."

"I think you are. It is the dye used in making changeable silk. If we fill a glass container with a fluorescein solution and look at it by reflected light it appears green. If we look at it by transmitted light, that is, light which has traversed the solution, it appears red. In other words, this is a substance which

reflects green light, allows a free passage to red light, and absorbs all other light. This creature we are after, if my theory is correct, is composed of a substance which allows free passage to all of the visible light rays and at the same time reflects ultra-violet light. Do I make this clear?"

"Perfectly."

"Very well, then. My apparatus will project forward a beam of ultra-violet light which will be in much greater concentration than exists in an incandescent electric light. It is my hope that this light will be reflected by the body of the creature to a sufficient to allow me to make a photograph of it."

"But won't your lens prevent the ultra-violet light from reaching your plate?"

"An ordinary lens made of optical glass would do so, but I have a camera here equipped with a rock crystal lens, which will allow ultra-violet light to pass through it practically unhindered, and with very slight distortion. When I add that I will have my camera

charged with X-ray film, a film which is peculiarly sensitive to the shorter wave-lengths, you will see that I will have a fair chance of success."

"It sounds logical. Would you allow me to accompany you when you make your attempt?"

"I will be glad of your company, if you can drive a tank. I want to take Carnes with me, and the tank will only hold two besides the driver."

"I can drive a tractor."

"In that case you should master the tricks of tank driving in short order. Get familiar with it and we'll appoint you as driver. We'll be ready to go in to-night, but I am going to wait a day. Our friend was fed last night, and there is less chance he'll be about."

The early part of the next evening was marked by howls and screams coming from the mouth of the cave. As the night wore on the noises were quite evidently coming nearer and the sentries watched the cave mouth nervously, ready to bolt and scatter



according to their orders at the first alarm. About two A. M. the doctor and Carnes climbed into the tank beside Lieutenant Leffingwell, and the machine moved slowly into the cave. A search-light on the front of the tank lighted the way for them and, attached to a frame which held it some distance ahead of them, was a luckless sheep.

"Keep your eye on the mutton, Carnes," cautioned the doctor. "As soon as anything happens to it, shut off the search-light and let me try to get a picture. As soon as I have made my exposures I'll tell you, and you can snap it on again. Lieutenant, when the picture is made, turn your tank and make for the entrance to the cave. If we are lucky, we'll get out."

Forward the tank crawled, the sheep bleating and trying to break loose from the bonds which held it. It was impossible to hear much over the roar of the motor, but presently Dr. Bird leaned forward, his eyes shining.

"I smell musk," he announced. "Get ready for action."

Even as he spoke the sheep was suddenly lifted into the air. It gave a final bleat of terror, and then its head was torn from its body.

"Quick, Carnes!" shouted the doctor.

The search-light went out, and Carnes and the lieutenant could hear the slide of the ultra-violet light which Dr. Bird was manipulating open. For two or three minutes the doctor worked with his apparatus.

"All right!" he cried suddenly. "Lights on and get out of here!"

Carnes snapped on the search-light and Lieutenant Leffingwell swung the tank around and headed for the cave mouth. For a few feet their progress was unhindered and then the tank ceased its forward motion, although the motor still roared and the track slid on the cave floor. Carnes watched with horror as one side of the tank bent slowly in toward him. There was a rending sound, and a portion of the heavy steel fabric was torn away. Dr. Bird bent over something on the floor of the tank. Presently he straightened up and

threw a small object into the darkness. There was a flash of light, and bits of flaming phosphorus flew in every direction. The anchor which held the tank was suddenly loosed and the machine crawled forward at full speed, while a roar as of escaping air mingled with a bellowing shriek burdened the smoke-laden air.

"Faster!" cried the doctor, as he threw another grenade.

Lieutenant Leffingwell got the last bit of speed possible out of the tank and they reached the cave mouth without further molestation.

"I had an idea that our friend wouldn't care to pass through a phosphorus screen," said Dr. Bird with a chuckle as he climbed out of the tank. "He must have been rather severely burned the other day, and once burned is usually twice shy. Where is Major Brown?"

The commanding officer stepped forward.

"Drive a couple of cattle into the cave, Major," directed Dr. Bird. "I want to fill that brute up and

keep him quiet for a while. I'm going to develop my films."

Lieutenant Leffingwell and Carnes peered over the doctor's shoulders as he manipulated his films in a developing bath. Gradually vague lines and blotches made their appearance on one of the films, but the form was indistinct. Dr. Bird dropped the films in a fixing tank and straightened up.

"We have something, gentlemen," he announced, "but I can't tell yet how clear it is. It will take those films fifteen minutes to fix, and then we'll know."

In a quarter of an hour he lifted the first film from the tank and held it to the light. The film showed a blank. With an exclamation of disappointment he lifted a second and third film from the tank, with the same result. He raised the fourth one.

"Good Lord!" gasped Carnes.

In the plate could be plainly seen the hind quarters of the sheep held in the grasp of such a monster as even

the drug-laden brain of an opium smoker never pictured. Judging from the sheep, the monster stood about twenty feet tall, and its frame was surmounted by a head resembling an overgrown frog. Enormous jaws were opened to seize the sheep but, to the amazement of the three observers, the jaws were entirely toothless. Where teeth were to be expected, long parallel ridges of what looked like bare bone, appeared, without even a rudimentary segregation into teeth. The body of the monster was long and snakelike, and was borne on long, heavy legs ending in feet with three long toes, armed with vicious claws. The crowning horror of the creature was its forelegs. There were of enormous length, thin and attenuated looking, and ended in huge misshapen hands, knobby and blotched, which grasped the sheep in the same manner as human hands. The eyes were as large as dinner plates, and they were glaring at the camera with an expression of fiendish malevolence which made Carnes shudder.

"How does that huge thing ever get through that crack we examined?" demanded the lieutenant.

Dr. Bird rubbed his head thoughtfully.

"It's not an amphibian," he muttered, "as is plainly shown by the shape of the limbs and the lack of a tail, and yet it appears to have scales of the true fish type. It corresponds to no recovered fossil, and I am inclined to believe it is unique. The nervous organisation must be very low, judging from the lack of forehead and the general conformation. It has enormous strength, and yet the arms look feeble."

"It can't get through that crack," insisted the lieutenant.

"Apparently not," replied the doctor. "Wait a moment, though. Look at this!"

He pointed to the great disproportion between the length and diameter of the forelegs, and then to the hind legs.

"Either this is grave distortion or there is something mighty queer about that conformation. No animal could be constructed like that."

He turned the film so that an oblique light fell on it. As he did so he gave a cry of astonishment.

"Look here!" he said sharply. "It does get through that crack! Look at those arms and hands! There is the answer. This creature is tall and broad, but from front to rear it can measure only a few inches. The same must be true of the froglike head. That animal has been developed to live and move in a low roofed cavern, and to pass through openings only a few inches wide. Its bulk is all in two dimensions!"

"I believe you're right," said Carnes as he studied the film.

"There is no doubt of it," answered the doctor. "Look at those paws, too, Carnes. That substance isn't bone, it's gum. The thing is so young and helpless that it hasn't cut its teeth yet. It must be a baby, and that is the reason why it made its way into the cave when no other of its kind ever has."

"How large are full grown ones if this is a baby?" asked the lieutenant.

"The Lord alone knows," replied Dr. Bird. "I hope that I never have to face one and find out. Well, now that we know what we are fighting, we ought to be able to settle its hash."

"High explosive?" suggested the lieutenant.

"I don't think so. With such a low nervous organization, we would have to tear it practically to pieces to kill it, and I am anxious to keep it from mutilation for scientific study. I have an idea, but I'll have to study a while before I am sure of the details. Send me the radio operator."

The next day the Bureau mechanics began to dismount the apparatus from the tank and to assemble another elaborate contrivance. Before they had made an end of the work additional equipment arrived from Washington, which was incorporated in the new set-up. At length Dr. Bird pronounced himself ready for the attempt.



Under his direction, three cattle were driven into the cave and there tethered. They were there the next morning unharmed, but the second night the now familiar bellowing and howling came from the depths of the cave and in the morning two of the cattle were gone.

"That will keep him quiet for a day or two," said the doctor, "and now to work!"

The tank made its way into the cave, dragging after it two huge cables which led to an engine-driven generator outside the cave. These cables were attached to the terminals of a large motor which was set up in the cave near the place where the cattle were customarily tethered. This motor was the actuating force which turned two generators, one large and one small. The smaller one was mounted on a platform on wheels, which also contained the spark gaps, the reflectors and other apparatus which produced the beam of ultra-violet light which had been used to photograph the monster.

From the larger generator led two copper bars. One

of these was connected to a huge copper plate which was laid flat on the floor of the cave. The other led to a platform which was erected on huge porcelain insulators some fifteen feet above the floor. Huge condensers were set up on this platform, and Dr. Bird announced himself in readiness.

A steer was dragged into the cave and up a temporary runway which led to the platform containing the condensers, and there tied with the copper bus bar from the larger generator fastened to three flexible copper straps which led around the animal's body. When this had been completed, everyone except the doctor, Carnes, and Lieutenant Leffingwell left the cave. These three crouched behind the search-light which sent a mild beam of ultra-violet onto the platform where the steer was held. The engine outside the cave was started, and the three men waited with tense nerves.

For several hours nothing happened. The steer tried from time to time to move and, finding it impossible, set up plaintive bellows for liberty.

"I wish something would happen," muttered the lieutenant. "This is getting on my nerves."

"Something is about to happen," replied Dr. Bird grimly. "Listen to that steer."

The bellowing of the steer had suddenly increased in volume and, added to the note of discontent, was a note of fright which had previously been absent. Dr. Bird bent over his ultra-violet search-light and made some adjustments. He handed a helmetlike arrangement to each of his companions and slipped one on over his head.

"I can't see a thing, Doctor," said Carnes in a muffled voice.

"The objects at which you are looking absorb rather than reflect ultra-violet light," said the doctor. "This is a sort of a fluoroscope arrangement, and it isn't perfect at all. However, when the monster comes along, I am pretty sure that you will be able to see it. You may see a little more as your eyes get accustomed to it."

"I can see very dimly," announced the lieutenant in a moment.

Dimly the walls of the cave and the platform before them began to take vague shape. The three stared intently down the beam of ultra-violet light which the doctor directed down the passageway leading deeper into the cave.

"Good Lord!" ejaculated Carnes suddenly.

Slowly into the field of vision came the hideous figure they had seen on the film. As it moved forward a rustling, slithering sound could be heard, even over the bellowing of the steer and the hum of the apparatus. The odor of musk became evident.

Along the floor toward them the thing slid. Presently it reared up on its hind legs and its enormous bulk became evident. It turned somewhat sideways and the correctness of Dr. Bird's hypothesis as to its peculiar shape was proved. All of the bulk of the creature was in two dimensions. Forward it moved, and the horrible human hands stretched forward, while the mouth

split in a wide, toothless grin. Nearer the doomed steer the creature approached, and then the reaching hands closed on the animal.

There was a blinding flash, and the monster was hurled backward as though struck by a thunderbolt, while a horrible smell of musk and burned flesh filled the air.

"After it! Quick!" cried the doctor as he sprang forward.

Before he could reach the prostrate creature it moved and then, slowly at first, but with rapidly gaining speed, it slithered over the floor in retreat. Dr. Bird's hand swung through an arc, and there was a deafening crash as a hand-grenade exploded on the back of the fleeing monster.

An unearthly scream came from the creature, and its motion changed from a steady forward glide to a series of convulsive jerks. Leffingwell and Carnes threw grenades, but they went wide of their mark, and the monster began to again increase its speed.

Another volley of grenades was thrown and one hit scored, which slowed the monster somewhat but did not arrest the steady forward movement.

"Any more bombs?" demanded the doctor.

"Damn!" he cried as he received negative answers.

"The current wasn't strong enough. It's going to get away."

Carnes jerked his automatic from under his armpit and poured a stream of bullets into the fleeing monster. Slower and slower the motion of the creature became, and its movements again became jerky and convulsive.

"Keep it in sight!" cried the doctor. "We may get it yet!"

Cautiously the three men followed the retreating horror, Leffingwell pushing before him the platform holding the ultra-violet ray apparatus. The chase led them over familiar ground.

"There is the crack!" cried the lieutenant.

"Too late!" replied the doctor.

He rushed forward and seized the lower limb of the monster and tried with all his strength to arrest its flight, but despite all that he could do it slid sideways through the crack in the wall and disappeared. A final backward kick of its leg threw the doctor twenty feet against the far wall of the cave.

"Are you hurt, Doctor?" cried Carnes.

"No, I'm all right. Put on your masks and start the gas! Quick! That may stop it before it gets in far!"

The three adjusted gas masks and thrust the mouths of two gas cylinders which were on the light truck into the crack, and opened the valves. The hissing of the gas was accompanied by a thrashing, writhing sound from the bowels of the earth for a few minutes, but the sound retreated and finally died away into an utter silence.

"And that's that!" cried the doctor half an hour later as they took off their gas masks outside the cave. "It got away from us. Carnes, how soon can we get a train back to Washington?"

"What kind of a report are you going to make to the Bureau, Doctor?" asked Carnes as they sat in the smoker of a southern train, headed for the capital.

"I'm not going to put in any report, Carnes," replied the doctor. "I haven't got the creature or any part of it to show, and no one would believe me. I am going to maintain a discreet silence about the whole matter."

"But you have your photograph to show, Doctor, and you have my evidence and Lieutenant Leffingwell's."

"The photograph might have been faked and I might have doped both of you. In any case, your words are no better than mine. No, indeed, Carnes, when I failed to make the current strong enough to kill it outright I made the first of the moves which bind me to silence, although I thought that two hundred thousand volts would be enough.



"The second failure I made was when I missed him with my second grenade, although I doubt if all six would have stopped him. My third failure was when we failed to get a sufficient concentration of cyanide gas into that hole in a hurry. The thing is so badly crippled that it will die, but it may take hours, or even days, for it to do so. It has already made its way so far into the earth that we couldn't reach it by blasting without danger of bringing the whole place down on our heads. Even if we could blast our way into the place it came from I wouldn't dare open a path which would allow Lord only knows what terrible monsters to invade the earth. When the soldiers have finished stopping that crack with ten feet of solid masonry, I think the barrier will hold, even against that critter's papa and mamma and all its relatives. Then Mammoth Cave will be safe for visitors again. That latter fact is the only report which I will make."

"It is a dandy story to go to waste," said Carnes soberly.

"Tell it then, if you wish, and get laughed at for your pains. No, Carnes, you must learn one thing. A man

like Bolton, for instance, will implicitly believe that a four leaf clover in his watch-charm will bring him good luck, and that carrying a buckeye keeps rheumatism away from him; but tell him a bit of sober fact like this, attested by three reliable witnesses and a good photograph, and you'll just get laughed at for your pains. I'm going to keep my mouth shut."

"So be it, then!" replied Carnes with a sigh.